

1888

From 1286 to 1335

ORIGINAL LOG BOOK OF THE "FISH HAWK"

UNITED STATES FISH COMMISSION

STATION NUMBERS

Numbers 1286 to 1335

$$\begin{array}{r} 24 \\ 15 \\ \hline 19 \end{array}$$

1286

Specimens Obtained
Skates flat fish. Sea Robbins
Lemon sole Star fish. Hermit crabs



TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1286*

Date, *Sept 6th 89*

Locality, *Munemsha Bay & Vineyard Sound*

Bearings, *Layhead N 1/2 S Quicks Hole S S W*

Tan Pauline Cove S S E 1/4 E

Time of day, *11:22 am* ; of tide, *High*

State of sky, *b-c*

Temperature of air, *63*

" surface of water, *63*

" at depth of fathoms,

" of bottom, *63*

Depth, in fathoms, *9*

Nature of bottom, *Sand*

Direction of ~~surface current~~, *Wind North*

Force of ~~surface current~~, *Wind 4*

Direction of ~~bottom current~~, *Levee S x E 1/2 E mag 1/8*

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James A. Smith
Master U.S.N.*

Name and position of observer,

*Samuel H. Smith
Master U.S.N.*

1287

REMARKS.

Specimens Obtained
 Lobsters Flat Fish, Skates,
 Sea Robins Star Fish, Hermit Crabs

TEMPERATURE RECORD.

Instrument used, *Beau Trawl*

Current number of observation, *1287*

Date, *Sept 6th 88*

Locality, *Minimha Right Wing and Sound*

Bearings, *Bay head N¹/₄ S Lead scale N¹/₂ N¹/₂ E*

Tor Paulin Cove N¹/₂ E³/₄ E

Time of day, *11.37 Am*; of tide, *Went*

State of sky, *bc*

Temperature of air, *62*

" surface of water, *65*

" at depth of fathoms,

" of bottom, *63*

Depth, in fathoms, *8. 1/4*

Nature of bottom, *Sand*

Direction of *Drift* surface current, *N*

Force of *Drift* surface current, *4*

Direction of *Drift* bottom current, *SE x E 1/2 E May 1/8*

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James A. Smith
Master U.S.N.*

Name and position of observer, *John L. Smith
Master U.S.N.*

6545678

1288

REMARKS.

Specimens Obtained
 Skate Flat fish sea Rabbits
 Conchs star fish, Young eels
 Sand crabs

TEMPERATURE RECORD

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1288*

Date, *Sept 6 88*

Locality, *Yumusha Bay Vineyard Sound*

Bearings, *Cay head N x S Quicks Hole x x x x*
Larpaulin Cove x E 3/4 E

Time of day, *11.55 am*; of tide, *low*

State of sky, *bc*

Temperature of air, *62*

" surface of water, *65*

" at depth of fathoms,

" of bottom, *63*

Depth, in fathoms, *8*

Nature of bottom, *Sand*

Direction of ~~surface~~ *wind* current, *North*

Force of ~~surface~~ *wind* current, *4*

Direction of ~~bottom~~ *drift* current, *x x x*

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *26d 76*

Name and rank of commanding officer, *Jesse A. Smith*
Master U.S.N.

Name and position of observer,

J. H. Lightham
Master U.S.N.

BEWVVK2

1289
REMARKS.

Specimens Obtained
Winkles / Star fish. Razor fish shells
Scallop shell, Winkle spawn
~~Clams~~ Stones. Conch, Quahog
shells, King crabs

TEMPERATURE RECORD.

Instrument used, *Oyster dredge*

Current number of observation, *1289* 21

Date, *Sept 13*

Locality, *Narragansett Bay*

Bearings, *Cominieu Pt 140 N x E 1/2 E*
Narrick Pt 170 S Allen Rock Beacon E 1/2 N

Time of day, *9.55 Am*, of tide, *Flood 1st 2nd*

State of sky, *b-c*

Temperature of air, *65*

" surface of water, *65*

" at depth of *65* fathoms,

" of bottom, *66*

Depth, in fathoms, *2.5*

Nature of bottom, *gray sand*

Direction of ~~surface~~ *wind* current, *W 8 W*

Force of ~~surface~~ *wind* current, *2*

Direction of ~~bottom~~ *drift* current,

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S. F.C.*

Name and rank of commanding officer, *James I. Smith*
Master

Name and position of observer, *Wm. H. Smith*
Master U.S. F.C.

1290
REMARKS.

Specimens Obtained
One large stone

TEMPERATURE RECORD.

Instrument used, *Oyster Thermometer*

Current number of observation, *1290*

22

Date, *Annamattit Bay Sept 13*

Locality, *Annamattit Bay*

Bearings, *Cominicut Pt No N 7 E 3/4 E*

Warrick Pt S 1/2 W Allen Rock Beacon E 1/4 N

Time of day, *10.10 am*; of tide, *Flot T*

State of sky, *bc*

Temperature of air, *70*

" surface of water, *66*

" at depth of fathoms,

" of bottom, *67*

Depth, in fathoms, *3*

Nature of bottom, *Mud*

Direction of ~~surface current~~, *W SW*

Force of ~~surface current~~, *2*

Direction of bottom current.

Force of bottom current.

Name of vessel, *U S Fr Fish Hawk*

To what service attached, *U S F C*

Name and rank of commanding officer, *Jesse H. Smith
Master USN*

Name and position of observer, *J. M. L. Smith
Master USN*

1291
REMARKS.

Specimens Obtained
Nothing

TEMPERATURE RECORD.

Instrument used,

Dyster Sling

Current number of observation, *1291*

Date, *Sept 13* 88

23

Locality, *Narragansett Bay*

Bearings, *Commencement to No. 26 1/4 E*

Warwick to No. 26 1/4 E

Time of day, *10.30* ; of tide, *Half Flood*

State of sky,

bc

Temperature of air,

70

" surface of water, *66.5*

" at depth of fathoms,

" of bottom, *66*

Depth, in fathoms,

4

Nature of bottom,

Mud

Direction of ~~surface~~ current,

Mud *Leads*

Force of ~~surface~~ current,

gird

Direction of bottom current,

Force of bottom current,

Name of vessel,

U.S. Fish Hawk

To what service attached,

U.S.F.C.

Name and rank of commanding officer,

James H. Smith
Master of the

Name and position of observer,

John H. Smith
Master of the

1292
REMARKS.

Specimens Obtained
Nothing

TEMPERATURE RECORD.

Instrument used, *Dyer's Hydrometer*

Current number of observation, *1292*

24

Date, *Sept 13th 88*

Locality, *Stamford Bay*

Bearings, *Cominical St 40 N 28 1/4 E*

Warwick St 40 N 28 1/4 E, Allens Rock Beacon N 28 1/2 E

Time of day, *10.55* : of tide, *Half flood*

State of sky, *bc*

Temperature of air, *72*

" surface of water, *67.5*

" at depth of fathoms,

" of bottom, *66*

Depth, in fathoms, *6.5*

Nature of bottom, *Mud*

Direction of ~~surface current~~, *Wind* *calm*

Force of ~~surface current~~, *Wind*

Direction of bottom current,

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S. F.C.*

Name and rank of commanding officer, *James Abner*
Master

Name and position of observer, *W. L. H. H.*
Master

1293

REMARKS.

*Specimens Obtained
Nothing*

TEMPERATURE RECORD.

Instrument used,

Dyster Bridge

Current number of observation,

1293

25

Date,

Sept 18 88

Locality,

Stamford Bay

Bearings,

Commenced at No. North

Warrick at N 7/4 E, Allen Rod Beacon N E

Time of day,

11.10 am of tide, *low*

State of sky,

bc

Temperature of air,

72

surface of water,

67

at depth of

fathoms,

of bottom,

67

Depth, in fathoms,

4

Nature of bottom,

Mud

Direction of surface current,

Wind N 4 W

Force of surface current,

Wind 2

Direction of bottom current,

Force of bottom current,

Name of vessel,

U.S. Fish Hawk

To what service attached,

U.S. Fish

Name and rank of commanding officer,

*James A. Smith
Master USN*

Name and position of observer,

*Washington
Master USN*

1294

REMARKS.

Specimens Obtained

Flat Fish Spider Crabs

Oyster & scallop shells, young

& cup dead winkles, Hermit

Crab, & Clam shells

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1294*

Date, *Sept 13" 88*

Locality, *Starragumete Bay*

Bearings, *Entrance to the N 1/4 W*

Wrecked at 7/2 S. 1/2 E. Rock beacon at S 1/2 E

Time of day, *11:33 am*, of tide, *3 25 Flood*

State of sky, *bc*

Temperature of air, *72*

" surface of water, *67*

" at depth of fathoms,

" of bottom, *66*

Depth, in fathoms, *4*

Nature of bottom, *Mud*

Direction of ~~surface current~~, *Wind N 1/4 W*

Force of ~~surface current~~, *Wind 2*

Direction of bottom current,

Force of bottom current,

Name of vessel, *U. S. Fish Hawk*

To what service attached, *26 S 76*

Name and rank of commanding officer, *James A. Smith
Master*

Name and position of observer, *J. M. Smith
Master*

1295
REMARKS.

Specimens Obtained
Leondis. Squilla Flat fish,
1 Star fish, Spider Crabs, Hermit
Crabs. Dead Clam shells
Skate Eggs.

TEMPERATURE RECORD.

Instrument used, *Beam Trawl* 27

Current number of observation, *1295*

Date, *Sept 13th 88*

Locality, *Maragannet Bay*

Bearings, *Commence to N 1/4 W*

March to N 1/4 S, Allens Rock beam N E x E

Time of day, *11:52 AM* : of tide, *3rd Flood*

State of sky, *bc*

Temperature of air, *71*

" surface of water, *67*

" at depth of fathoms,

" of bottom, *66*

Depth, in fathoms, *3.5*

Nature of bottom, *Mud*

Direction of ~~surface current~~ *Wind WNW*

Force of ~~surface current~~ *Wind 2*

Direction of bottom current,

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James R. Smith*
Master USN

Name and position of observer, *John L. Linton*
Master USN

1296

REMARKS.

Specimens Obtained
King Crab 1 Star fish. Spider
Crabs. Scallops Flat fish
Hermit crabs, Kelp, Young sculp

TEMPERATURE RECORD.

Instrument used, *Beaman Trawl*

29

Current number of observation, *1296*

Date, *Sept 15 88*

Locality, *Starafamite Reef*

Bearings, *Conimicut Pt No N 74 W*

Warrick S 72 W 1/4 N. Allen Rock Beacon S 61 E 1/2 E

Time of day, *12:03 Pm*; of tide, *3:25 Flood*

State of sky, *bc*

Temperature of air, *72*

" surface of water, *67.5*

" at depth of fathoms,

" of bottom, *66*

Depth, in fathoms, *8.2*

Nature of bottom, *Mud*

Direction of ~~surface~~ *Wind* current, *N 74 W*

Force of ~~surface~~ *Wind* current, *3*

Direction of bottom current,

Force of bottom current,

Name of vessel, *U S Ste Fish Hawk*

To what service attached, *U S F C*

Name and rank of commanding officer, *James A Smith*
Master

Name and position of observer, *Sturges*
Master

1297

REMARKS.

Specimens Obtained
same as 1296
with the exception of no star fish

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

29

Current number of observation, *1297*

Date, *Sept 13th 88*

Locality, *Barrymore Bay*

Bearings, *Gunwale to No N X W*

Wreck to S X W 1/2 W. Main Rock Beacon S X N 1/4 N

Time of day, *12.55 PM* : of tide, *High Water*

State of sky, *bc*

Temperature of air, *72*

surface of water, *69*

at depth of fathoms,

of bottom, *66.5*

Depth, in fathoms, *4*

Nature of bottom, *Mud*

Direction of surface current, *Mud S X W*

Force of surface current, *2*

Direction of bottom current,

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *No 576*

Name and rank of commanding officer, *James A. Smith
Master*

Name and position of observer, *J. M. Smith
Master*

1298

REMARKS.

Specimens Obtained
Black Ironsides & Shells
Starfish. Wrinkles flat fish

TEMPERATURE RECORD.

Instrument used, *Barium Therm* 26
 Current number of observation, *1298*
 Date, *Sept 13" 88*
 Locality, *Faraway Point Bay*
 Bearings, *Commelet Pt N 45° W 2 1/4 N*
Narrowed Pt S 70° W. Allen's Rock beacon E 3/4 N
 Time of day, *12.35 PM*; of tide, *High Water*
 State of sky, *b c*
 Temperature of air, *72*
 " surface of water, *68.5*
 " at depth of fathoms,
 " of bottom, *66.5*
 Depth, in fathoms, *5*
 Nature of bottom, *Mud*
 Direction of surface current, *Drift 2 1/2 N W*
 Force of surface current, *3*
 Direction of bottom current.
 Force of bottom current.
 Name of vessel, *U.S. Fish Hawk*
 To what service attached, *U.S. 76*
 Name and rank of commanding officer, *James A. Smith*
Master
 Name and position of observer, *J. M. Light*
Master

REMARKS.

Specimens Obtained
 Rock sponge & scallop shells
 stones. 3 starfish. Dead Ray
 Fish shells. Few shells Crabs

TEMPERATURE RECORD.

Instrument used, *Dryter Knaps*

Current number of observation, *1299*

Date, *Sept 18" 88*

Locality, *Tranquillity Bay*

Bearings, *Comimicus de Ho r r r r*

Harwich St. Allen Rock Beacon E X S

Time of day, *1. 30 Pm*; of tide, *High water*

State of sky, *bc*

Temperature of air, *69*

" surface of water, *67*

" at depth of fathoms,

" of bottom, *67*

Depth, in fathoms, *5.2*

Nature of bottom, *Mud*

Direction of surface current, *Wind r r r r*

Force of surface current, *3*

Direction of bottom current.

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James A. Smith
Master*

Name and position of observer, *Frederick
Master*

1300
REMARKS.

Specimens Abolished
Lushogoff - 4 some dead shells

TEMPERATURE RECORD.

Instrument used, *Oyster Dredge*

Current number of observation, *1340*

Date, *Sept 13* 88

Locality, *Manzanilla Bay*

Bearings, *Cominicut Pt N by N N W*
Narrick Pt S N $\frac{1}{2}$ W. Allen Rock Beacon E 34 S

Time of day, *1.54* : of tide, *1st 3rd Ebb*

State of sky,

Temperature of air, *72*

" surface of water, *66.5*

" at depth of fathoms,

" of bottom, *66*

Depth, in fathoms, *3.5*

Nature of bottom, *Gravel*

Direction of ~~surface~~ *Wind* *N N W*

Force of ~~surface~~ *Wind* *3*

Direction of bottom current,

Force of bottom current,

Name of vessel, *U.S. Ste Fish Hawk*

To what service attached, *26876*

Name and rank of commanding officer, *James L Smith*
Master USN

Name and position of observer, *William H. Smith*
Master USN

1301

REMARKS.

Specimens Obtained
Pike fish, King Crabs, Flat fish
Spider Crabs, Hermit Crabs
Winkles, seaweed, Black Murel
Conches, Scallop shells

TEMPERATURE RECORD.

Instrument used, *Beane Trawl*

Current number of observation, *1301*

Date, *Sept 18th 88*

Locality, *Warraginnett Bay*

Bearings, *Conimicut Pt. No. 1 1/4 N*

Marwick Pt. S 1/2 W 1/2 N. Allen Rock Beacon E 1/4 N

Time of day, *2:12 P.M.* : of tide, *1st 2nd Ebb*

State of sky,

Temperature of air, *72*

" surface of water, *66*

" at depth of fathoms,

" of bottom, *66*

Depth, in fathoms, *4*

Nature of bottom, *Mud*

Direction of ~~surface~~ *Wind* *W 1/4 N*

Force of ~~surface~~ *Wind* *3*

Direction of bottom current,

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James A. Smith*
Master

Name and position of observer, *J. M. Smith*
Master

1302

REMARKS.

Specimens Obtained
Flat fish Winkles, Dead
Oyster & Scallop shells. Hermit
Crab & Lady Crabs

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1302*

Date, *Sept 13th 88*

Locality, *Martha's Vineyard*

Bearings, *Commencement Pt. N 40° W 1/2 N*

Winnick Is. N 1/2 S 1/4 S. Adams Rock Beacon N 2° E

Time of day, *2.24 P.M.*; of tide, *1st 2nd Ebb*

State of sky, *bc*

Temperature of air, *72*

" surface of water, *67*

" at depth of fathoms,

" of bottom, *65*

Depth, in fathoms, *5.5*

Nature of bottom, *Mud*

Direction of surface current,

Force of surface current,

Direction of *surface* current, *N 1/2 W*

Force of *surface* current, *3*

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S. F. & M.*

Name and rank of commanding officer, *James A. Smith*

Master

Name and position of observer,

W. S. Kirtland
Master

1308

REMARKS.

Specimens Obtained
Oyster & clam shells / starfish
/ squid

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1303*

Date, *Sept 13th 88*

Locality, *Managumett Bay*

Bearings, *Commence to North $N\frac{1}{4}E$*

Maranda $66^{\circ}48'12''S$ Allens Rock Beacon $N\frac{1}{4}E$

Time of day, *2.34^{hr}* of tide, *1st 2nd Ebb*

State of sky, *bc*

Temperature of air, *72*

" surface of water, *67*

" at depth of fathoms,

" of bottom, *65*

Depth, in fathoms, *5 $\frac{1}{2}$*

Nature of bottom, *Gravel*

Direction of ~~surface current~~ *Wind* *W or W*

Force of ~~surface current~~ *Wind* *3*

Direction of bottom current,

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James A. Bourke*
Master

Name and position of observer, *J. A. Bourke*
Master

1804

REMARKS.

Specimens Obtained
Flat Fish Hermit Crabs
Spider Crabs. Sea Anemones
Shells & Stones. Star Fish &

TEMPERATURE RECORD.

Instrument used, *Beam Trawl* 32
 Current number of observation, *1304*
 Date, *Sept 13th 88*
 Locality, *Narragansett Bay*
 Bearings, *Commencement Pt No 1 x 11 3/4 N*
Narragansett Pt S. Allen's Rock Beacon x 6 1/2 N
 Time of day, *2.46 PM*; of tide, *1st 2nd Ebb*
 State of sky, *bc*
 Temperature of air, *72*
 " surface of water, *67*
 " at depth of fathoms,
 " of bottom, *65.5*
4.5
 Depth, in fathoms,
 Nature of bottom, *Mud*
 Direction *Sound water*
 Force of ~~surface current~~, *4*
 Direction of bottom current,
 Force of bottom current,
 Name of vessel, *U.S. Fish Hawk*
 To what service attached, *U.S. F.C.*
 Name and rank of commanding officer, *James A. Smith*
Quartermaster
 Name and position of observer, *John Knight*
Quartermaster

1305

REMARKS.

Specimens Obtained
Flat fish Spider Crabs, Anchors
Hairs, Ripe fish. Dead oyster &
Scallops shells

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1305*

Date, *Sept 28 88*

Locality, *Ensenada Bay*

Bearings, *Ensenada Pt. N. 40° E. 2 1/4 m*

Varadero Pt. N. 40° E. 2 1/4 m. Allen's Rock S. 20° E. 1/4 m.

Time of day, *2.55 PM*; of tide, *1' 2" Ebb*

State of sky, *bc*

Temperature of air, *73.5*

" surface of water, *67*

" at depth of fathoms,

" of bottom, *66*

Depth, in fathoms, *5*

Nature of bottom, *Mud*

Direction of surface current, *Wind N 20° W*

Force of surface current, *Wind 3*

Direction of bottom current,

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *26576*

Name and rank of commanding officer, *James R. Smith
Lieutenant*

Name and position of observer, *Wm. S. K. Smith
Lieutenant*

TEMPERATURE RECORD.

Instrument used, *Oyster dredge*

Current number of observation, *1886*

28

Date, *Sept 14 1886*

Locality, *Providence River*

Bearings, *Conimicut Pt S x E*

Bullocks Pt S x S 3/4 S Sayat Pt E x E

Time of day, *10 05* : of tide, *10 25 Flood*

State of sky, *bc*

Temperature of air, *50*

" surface of water, *69*

" at depth of fathoms,

" of bottom, *64*

Depth, in fathoms, *8*

Nature of bottom, *Wmud*

Direction of ~~surface~~ current, *Wmud*

Force of ~~surface~~ current, *Wmud*

Direction of bottom current,

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S. Fish*

Name and rank of commanding officer, *James A. Smith*
Master

Name and position of observer, *John L. Smith*
Master

1307

REMARKS.

Specimens obtained
Starfish flat fish Hairs oysters
shell mussel shells Cynids
Lichops scallop shell Spider
Crabs, King crabs, South Fish

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*
 Current number of observation, *1307* *39*
 Date, *Sept 17 88*
 Locality, *Providence River*
 Bearings, *Benimicut Lt S E 1/4 S*
Bullocks Lt S E 3/4 S Nuyt Pt East
 Time of day, *11.59 am*; of tide, *1st 2nd Flood*
 State of sky, *bc*
 Temperature of air, *66*
 " surface of water, *64*
 " at depth of fathoms,
 " of bottom, *64*
 Depth, in fathoms, *7 1/2*
 Nature of bottom, *Sandy*
 Direction of ~~surface~~ *surface* current, *drift*
 Force of ~~surface~~ *surface* current, *2*
 Direction of bottom current,
 Force of bottom current,
 Name of vessel, *U S Fish Hawk*
 To what service attached, *U S F C*
 Name and rank of commanding officer, *James A. Smith*
Master USN
 Name and position of observer,
John A. Smith
Master USN

1888

REMARKS.

Specimens Obtained
Starfish young & deep Water Skate
Spider Crabs. King crabs Hermit
Crabs Conch. Oyster & Clam and
scallop shells

TEMPERATURE RECORD.

Instrument used, *Beam Trawl* 40

Current number of observation, *1308*

Date, *Sept 17 88*

Locality, *Providence River*

Bearings, *Gunimicut Pt S $86\frac{3}{4}$ S*

Bulletts Pt S W Ayat Pt S 82 S

Time of day, *12.06* ; of tide, *1 $\frac{1}{2}$ 2 $\frac{1}{2}$ Flood*

State of sky, *Clear*

Temperature of air, *52*

" surface of water, *64*

" at depth of fathoms,

" of bottom, *64.5*

Depth, in fathoms, *282*

Nature of bottom, *fine broken shells*

Direction of ~~surface~~ *surface* current, *Drift*

Force of ~~surface~~ *surface* current, *2*

Direction of ~~bottom~~ *bottom* current, *Drift*

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *No 856*

Name and rank of commanding officer, *James A. Smith*
Master

Name and position of observer,

J. M. Loughlin
Master

1309

REMARKS.

Specimens Obtained

same as 1308 except no starfish

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1309*

Date, *Sept 17 88*

Locality, *Providence River*

Bearings, *Commenced at 11-18 3/4 E*

Bullock's at 1/2 W Magnet at 1/2 E & 1/2 S

Time of day, *7.49* : of tide, *14.27 Ebb*

State of sky, *Cloudy*

Temperature of air, *68*

" surface of water, *66*

" at depth of fathoms,

" of bottom, *66*

Depth, in fathoms, *8*

Nature of bottom, *Gravel*

Direction of ~~surface current~~, *Drift 8*

Force of ~~surface current~~, *Drift 2*

Direction of ~~bottom current~~, *Drift*

Force of bottom current,

Name of vessel, *U.S.F.C. Fish Hawk*

To what service attached, *26176*

Name and rank of commanding officer, *James A. Smith
Master of the*

Name and position of observer, *Frederick A. Mearns
Master of the*

41

1310

REMARKS.

Specimens obtained
Shells, Crabs, Winkles, Flat
fish.

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1310*

42

Date, *Sept 17 88*

Locality, *Providence River*

Bearings, *Cominicut St S E 1/2 S*

Beuloches St S. Int. Bay at Pt E E E

Time of day, *7.54* : of tide, *1st 2nd ebb*

State of sky, *Cloudy*

Temperature of air, *68*

" surface of water, *66*

" at depth of fathoms,

" of bottom, *66*

Depth, in fathoms, *4 1/2*

Nature of bottom, *Mud*

Direction of ~~surface~~ *Wind* current, *S*

Force of ~~surface~~ *Wind* current, *2*

Direction of ~~bottom~~ *Wind* current,

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James A. Smith*
Master

Name and position of observer, *J. M. L. Nightingale*
Master

181
REMARKS.

Specimens Obtained
Spider Crabs Flat Fish
Young scup

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1311*

43

Date, *Sept 17*

Locality, *Providence River*

Bearings, *Conimicut Pt S E $3/4$ S*

Rattlesbait Pt S E $1/4$ E Sabins Pt N $1/2$ W

Time of day, *7:57* ; of tide, *1 st 2 nd Ebb*

State of sky, *Cloudy*

Temperature of air, *68*

" surface of water, *65*

" at depth of fathoms,

" of bottom, *6.6*

Depth, in fathoms, *4 $1/4$*

Nature of bottom, *mod*

Direction of ~~surface~~ *mod* current, *S*

Force of ~~surface~~ *mod* current, *2*

Direction of ~~bottom~~ *drift* current,

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S. F.C.*

Name and rank of commanding officer, *James A. Christie*
Master U.S.N.

Name and position of observer, *J. M. Johnston*
Master U.S.N.

1112

REMARKS.

Specimens Obtained
Spider. Crab. Flat fish
Oyster & scallop shells

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1212*

44

Date, *Sept 17th 88*

Locality, *Providence River*

Bearings, *Cornimicut Pt S E X S*

Bellows Pt S E X E 1/2 S Sabino Pt - North

Time of day, *8.04* : of tide, *1st Ebb*

State of sky, *Cloudy*

Temperature of air, *68*

" surface of water, *66*

" at depth of fathoms,

" of bottom, *66*

Depth, in fathoms, *5*

Nature of bottom, *Mud*

Direction of ~~surface~~ *Drift* current, *South*

Force of ~~surface~~ *Drift* current, *2*

Direction of ~~bottom~~ *Drift* current,

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S. F.C.*

Name and rank of commanding officer, *James A. Smith*
Master

Name and position of observer, *J. H. Langdon*
Master

1313

REMARKS.

Specimens Obtained
Winkles Flat Fish Spider
Crabs Mussels & Scallop Shells

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1813*

45

Date, *Sept 17* 88

Locality, *Providence River*

Bearings, *Cominicut Lt S E 1 S 1/2 S*

Bullocks Lt S E 1 E 1/4 E Satins Lt North

Time of day, *8-09* : of tide, *7 4/25, Ebb*

State of sky, *Cloudy*

Temperature of air, *68.5*

" surface of water, *66.5*

" at depth of fathoms,

" of bottom, *66*

Depth, in fathoms, *6 1/2*

Nature of bottom, *Mud*

Direction of *Wind* surface current, *South*

Force of *Wind* surface current, *2*

Direction of *Wind* bottom current,

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James A. Smith*
Master

Name and position of observer, *John H. Thompson*
Master

1314

REMARKS.

Specimens Obtained
 King Crab. Flat fish, Lady crab
 Hermit & sp. der crabs, Gonyu sp. etc.
~~Wm.~~ Winkler Oyster Lucioz & Scallops
 shells.

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1314*

66

Date, *Sept 19th 88*

Locality, *Narragansett Bay*

Bearings, *Conimicut Pt N 1/2 E 2 1/4 M*

Narragansett Pt 1/2 N 1/2 E 2 1/4 M

Time of day, *9:55* of tide, *1/2 Ebb*

State of sky, *Cloudy*

Temperature of air, *59*

" surface of water, *64*

" at depth of fathoms,

" of bottom, *64*

Depth, in fathoms, *7 3/4*

Nature of bottom, *Mud*

Direction of ~~surface~~ current, *W 1/2 N*

Force of ~~surface~~ current, *3*

Direction of ~~bottom~~ current,

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S. Fish*

Name and rank of commanding officer, *J. D. Smith*
Master

Name and position of observer, *W. H. Smith*
Master

1315

REMARKS.

Specimens Obtained
King & Hermit Crabs, Head
Shells, Clams, Flat fish & scallop
1 small star fish.

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*
 Current number of observation, *1315-* 67
 Date, *Sept 19 88*
 Locality, *Narragansett Bay*
 Bearings, *Conicut St N 1/2 W x 1/4 N*
Narrick St N 1/2 S. Allom Rock beam x 1/4 N
 Time of day, *10.22* ; of tide, *Ebb*
 State of sky, *Cloudy*
 Temperature of air, *58*
 " surface of water, *64.5*
 " at depth of fathoms,
 " of bottom, *63*
 Depth, in fathoms, *6*
 Nature of bottom, *Mud*
 Direction of ~~surface~~ *Mud* current, *N N W*
 Force of ~~surface~~ *Mud* current, *3*
 Direction of ~~bottom~~ *Drift* current,
 Force of bottom current,
 Name of vessel, *U S Frigate Hawk*
 To what service attached, *U S F*
 Name and rank of commanding officer, *Jesse B. Smith*
Comdr USN
 Name and position of observer, *J. M. Smith*
Master USN

1316

REMARKS.

Specimens Obtained
Skate Flat fish Haik
Squilla Gonyceps, Squid
King Crab, Butter fish, Bead
shells, Hermit-crab, Winkles
stones.

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation. *1816*

68

Date, *Sept 19*

Locality, *Narragansett Bay*

Bearings, *Seinecut Pt. No. 1 N. 2 1/4 E.*

Marine L. N. 2 1/4 S. 1/4 S. 1/4 E. 1/4 S. 1/4 E.

Time of day, *10 50* ; of tide, *Ebb 1/2*

State of sky, *Cloudy*

Temperature of air, *68*

" surface of water, *65*

" at depth of fathoms,

" of bottom, *63*

Depth, in fathoms, *5*

Nature of bottom, *Mud*

Direction of surface current, *Drift N. 1/4 E.*

Force of surface current, *2*

Direction of bottom current, *Drift*

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S. 76*

Name and rank of commanding officer, *James A. Smith
Master*

Name and position of observer, *Frederick
Master*

1317

REMARKS.

Specimens Obtained
King Crab Spider & Hermit Crab
Flat fish. Kelp, Head & sculp
& open shells.

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1317*

69

Date, *Sept 19" 88*

Locality, *Starapawett Bay*

Bearings, *Warrick Pt. N. 8 W. Allen Rock Beacon N. 8 E 1/2 S*

Time of day, *11:20 am*; of tide, *Ebb*

State of sky, *Cloudy*

Temperature of air, *60*

" surface of water, *64.5*

" at depth of fathoms,

" of bottom, *60*

Depth, in fathoms, *6 1/2*

Nature of bottom, *Sand*

Direction of ~~surface current~~ *Wend N. 8 W*

Force of ~~surface current~~ *2*

Direction of ~~bottom current~~

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S. F.C.*

Name and rank of commanding officer, *James A. Smith*
Master

Name and position of observer, *W. H. H. H.*
Master

1318
REMARKS.

Specimens Obtained
10 Starfish Flat fish, King crabs
Winkles, Hermit crabs, Spider
crabs, Hog choker

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*
 Current number of observation, *1318* *70*
 Date, *Sept 19* *88*
 Locality, *San Juan Bay*
 Bearings, *Cominicut Lt No 1 N 1/2 E*
Mannish Lt 8 N 2 W 1/2 W Allen Rock Beacon E 1/2 N
 Time of day, *11.35 am*; of tide, *Ebb 3/4*
 State of sky, *Cloudy*
 Temperature of air, *60*
 " surface of water, *65*
 " at depth of fathoms,
 " of bottom, *63.*
 Depth, in fathoms, *7*
 Nature of bottom, *1 mud*
 Direction of ~~surface~~ *wind* *N N W*
 Force of ~~surface~~ *wind* *2*
 Direction of ~~bottom~~ *W 1/2 E*
 Force of bottom current,
 Name of vessel, *U.S. Fish Hawk*
 To what service attached, *U.S. F.C.*
 Name and rank of commanding officer, *James A. Smith*
 Master
 Name and position of observer, *John H. Houghton*
 Master

1319
REMARKS.

Specimens Obtained
King crabs flat fish, Jelly fish
Prawn + Spider Crabs, small
oysters & scallop shells

TEMPERATURE RECORD.

Instrument used, *Beam Balance*

Current number of observation. 1319

Date, Sept 19 1988

Locality, *Marapamuthu* *Palu*.

Bearings. *Semimilae* to No 5 or 3/4 or

Marrick Ls Str 14 ft. Allen Rock Tracen E 1/2 S

Time of day, 11.50 am; of tide. Ebb 3/2 1/2

State of sky, *Clear sky*

Temperature of air, 60

“ surface of water, 65

“ at depth of fathoms,

of bottom, 63

Depth, in fathoms, 5-

Nature of bottom, 1. Mud & shell

Direction of ~~surface~~ current, *At At At*

Force of surface current, 2

Direction of bottom current,

Force of bottom current,

Name of vessel, *H. L. War Fish Hawk*

To what service attached, *46 47 5*

Name and rank of commanding officer, *James H. Venable*

Name and position of observer.

1320
REMARKS.

Specimens Obtained
Living deep flat fish skate
4 star fish. Spider & hermit crabs
Wear oyster & scallop shells.

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1320*

72

Date, *Sept 19 88*

Locality, *Providence River*

Bearings, *Cominicut Lt W 48 1/4 S*

Bullock's Lt W 14 1/4 S by at Pt N 2

Time of day, *1:45 PM* ; of tide, *Flood 1 1/2 2 1/2*

State of sky, *Cloudy*

Temperature of air, *67*

" surface of water, *67.5-*

" at depth of fathoms,

" of bottom, *60.5-*

Depth, in fathoms, *53 5*

Nature of bottom, *Mud & shells*

Direction of ~~surface~~ *Wind* *cloudy*

Force of ~~surface~~ *Wind* *2*

Direction of ~~bottom~~ *Drift* *East*

Force of bottom current, *Drift*

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S. Fish*

Name and rank of commanding officer, *James A. Smith*

Master

Name and position of observer,

John H. Thompson
Master

1321
REMARKS.

Specimens Obtained
Flat fish spider crabs
King Crab skate, Pike fish
Sculpin, sea urchin + scallop
shell.

TEMPERATURE RECORD.

Instrument used, *Beaman Trawl*

Current number of observation, *1321*

73

Date, *Sept 19 - 88*

Locality, *Providence River*

Bearings, *Cominical Lt S 57 1/2 E*

Bullocks Lt N 28 W 1/2 S Sayat Pt E x S

Time of day, *1.58 PM*; of tide, *Flood 1st Low*

State of sky, *Cloudy*

Temperature of air, *67*

" surface of water, *65.5*

" at depth of fathoms,

" of bottom, *65*

Depth, in fathoms, *6 1/4*

Nature of bottom, *Gravel & shell*

Direction of ~~surface~~ current, *Wind N x W*

Force of ~~surface~~ current, *Wind 2*

Direction of ~~bottom~~ current, *Drift*

Force of bottom current.

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S. F.C.*

Name and rank of commanding officer, *James E. Smith Master*

Name and position of observer, *Wm. H. Smith Master*

1822

REMARKS.

Specimens obtained
skate flat fish. Hermit Crab
Dead oyster. Scallops & Mussel shell

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1522*

74

Date, *Sept 19th 89*

Locality, *Providence River*

Bearings, *Cominac E S $\frac{1}{4}$ E*

Bullock's E S E $\frac{3}{4}$ S Magnet Pt E S $\frac{1}{2}$ S

Time of day, *2.22* hour of tide, *1st E flood*

State of sky, *Cloudy*

Temperature of air, *66*

" surface of water, *65.0*

" at depth of fathoms,

" of bottom, *64*

Depth, in fathoms, *4 $\frac{3}{4}$*

Nature of bottom, *Sand & Gravel*

Direction of ~~surface~~ *wind* current, *SE to W*

Force of ~~surface~~ *wind* current, *2*

Direction of bottom current.

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *No 8 Fl*

Name and rank of commanding officer, *James S. Smith*
Master USN

Name and position of observer, *J. M. Smith*
Master USN

1823

REMARKS.

Specimens Obtained
Here oyster & scallop shells
on a quantity of mud

TEMPERATURE RECORD.

Instrument used, *Agassiz Sledge*

Current number of observation, *1323*

75

Date, *Sept 24*

Locality, *Pear River*

Bearings, *Cornimicut Pt - S 22° 1/2 W*

Bullock's Pt - N W. Say at Pt - S 8 1/2 E

Time of day, *11.15* ; of tide, *High Water*

State of sky, *bc*

Temperature of air, *58*

" surface of water, *64*

" at depth of fathoms,

" of bottom, *62.5*

Depth, in fathoms, *2 3/4*

Nature of bottom, *Hard Sand*

Direction of *wind* ~~surface current~~, *N to E*

Force of *wind* ~~surface current~~, *3*

Direction of bottom current.

Force of bottom current.

Name of vessel, *Fish Hawk*

To what service attached, *USF C*

Name and rank of commanding officer, *James A. Smith*

Name and position of observer, *W. H. Smith*
Master

1324
REMARKS.

Specimens Obtained
from water & scallop shells and
4 sponges - 1.

TEMPERATURE RECORD.

Instrument used, *Dryden Hydrometer*

Current number of observation, *1324*

76

Date, *Sept 24*

Locality, *Prine River*

Bearings, *Cominicut Lt S $\frac{1}{2}$ E*

Bullock's Lt NW $\frac{1}{4}$ N Sayat Lt S $\frac{3}{4}$ E

Time of day, *1, 15 PM*; of tide, *1st Dr Ebb*

State of sky, *Partly Cloudy*

Temperature of air, *58*

" surface of water, *64.5*

" at depth of fathoms,

" of bottom, *63*

Depth, in fathoms, *2 $\frac{3}{4}$*

Nature of bottom, *Hard*

Direction of surface current, *Dr S $\frac{1}{2}$ E*

Force of surface current, *3*

Direction of bottom current,

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *USF*

Name and rank of commanding officer, *James L. Smith
Master USN*

Name and position of observer, *J. M. Smith
Master USN*

1325-

REMARKS.

Specimens Obtained
Dead Oyster & Scallop Shells
Narrow Crabs & small stones
3 Starfish

TEMPERATURE RECORD.

Instrument used, *Cyther. Ind. pr.*

Current number of observation, *1335*

77

Date, *Sept 24 88*

Locality, *Prov. River*

Bearings, *Cominicut Lt S 7/8 E*

Bullock Lt N 70 1/2 W Sayat Pt S E 1/4 E

Time of day, *1.35* of tide, *1st Lr Ebb*

State of sky, *b-c*

Temperature of air, *58*

" surface of water, *64.5*

" at depth of fathoms,

" of bottom, *63*

Depth, in fathoms, *3 1/2*

Nature of bottom, *Hard*

Direction of ~~surface current~~ *Wind* *N-E*

Force of ~~surface current~~ *Wind* *3*

Direction of bottom current,

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James A. Smith*

Master

Name and position of observer, *J. M. Smith*

Master

1326
REMARKS.

Specimens Obtained
Rocks Sponges, sponges, bryozoan, corals
shells.

TEMPERATURE RECORD.

Instrument used

Oyster Sounder

Current number of observation,

1326

78

Date,

Apr 24 88

Locality,

Low River

Bearings,

Cominicut Lt S 78 E

Rattles Lt S 78 W 1/2 N Sayat Pt S E

Time of day,

1.54 P.M. of tide, 1 2nd Ebb

State of sky,

b-c

Temperature of air,

58

"

surface of water,

64

"

at depth of

fathoms,

"

of bottom,

63

Depth, in fathoms,

2

Nature of bottom,

Hard

Direction of surface current,

mid S 4 E

Force of surface current,

mid 3

Direction of bottom current,

Force of bottom current,

Name of vessel,

Link Hawk

To what service attached,

US 76

Name and rank of commanding officer,

James A. Smith
Master

Name and position of observer,

W. H. Smith
Master

1327
REMARKS.

Specimens Obtained
Black Mussels and dead Shells
4 2 starfish.

TEMPERATURE RECORD.

Instrument used, *Oyster dredge*

Current number of observation, *1327*

79

Date, *Sept 24 1878*

Locality, *Parr River*

Bearings, *Entrance to S 1/4 E*

Bullock Pt N 1/4 W Sayat Pt S E 1/4 S

Time of day, *2.10 pm*; of tide, *1st Dr Ebb*

State of sky, *bc*

Temperature of air, *58*

" surface of water, *64.5*

" at depth of fathoms,

" of bottom, *64*

Depth, in fathoms, *10 1/2 feet*

Nature of bottom, *hard*

Direction of ~~surface~~ *wind* current, *N + E*

Force of ~~surface~~ *wind* current, *3*

Direction of bottom current,

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *26 & 76*

Name and rank of commanding officer, *James G. Smith*

Master

Name and position of observer, *John Smith*

Master

1328

REMARKS.

Specimens Obtained
from clams and oyster shells.
3 starfish 2 winkles.

TEMPERATURE RECORD.

Instrument used, *Oyster dredge*

Current number of observation, *1328*

= 80

Date, *Sept 24 98*

Locality, *Prin River*

Bearings, *Leominster - S - S 1/2 E*

Reluctant to run NW 1/4 N. Say at Pt SE 2 S

Time of day, *2.20 PM*; of tide, *2 1/2 Ebb*

State of sky, *Clear*

Temperature of air, *58*

" surface of water, *64.5*

" at depth of fathoms,

" of bottom, *6 f*



Depth, in fathoms, *11 feet*

Nature of bottom, *Sand*

Direction of ~~surface current~~, *W. N. E*

Force of ~~surface current~~, *3*

Direction of bottom current,

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James A. Smith
Master USN*

Name and position of observer, *J. M. L. H. Smith
Master USN*

1829
REMARKS.

Specimens Obtained
Lead Clams and Oyster and
scallop shells.
2 Starfish

TEMPERATURE RECORD.

Instrument used, *Oyster dredge*

Current number of observation, *1329*

81

Date, *Sept 24 08.*

Locality, *Proctor River*

Bearings, *Leominster Li. South*

Bullocks Pt. N W Day at Pt. 8 2 1/4 E

Time of day, *2.34* ; of tide, *2nd or Ebb*

State of sky, *bc*

Temperature of air, *58*

" surface of water, *64.5*

" at depth of fathoms,

" of bottom, *CT*

Depth, in fathoms, *2 1/4*

Nature of bottom, *Sand*

Direction of ~~surface~~ *Wind* current, *NNE*

Force of ~~surface~~ *Wind* current, *2*

Direction of bottom current,

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer, *James A. Smith
Master*

Name and position of observer, *John L. Smith
Master*

1830
REMARKS.

Specimens Obtained
Near Clam & Head Cryst. shells
Reared & from

TEMPERATURE RECORD.

Instrument used,

Optic Sledge

Current number of observation.

1330

+95

Date,

Sept 21 58

Locality,

Port River

Bearings,

Commenced at S $\frac{1}{4}$ W

Bullocks Pt NW $\frac{1}{2}$ Sec 17 T 5 S R 4 S

Time of day,

3.12 P

; of tide, *$\frac{1}{2}$ Ebb*

State of sky,

Clear

Temperature of air,

60

"

surface of water,

64

"

at depth of

fathoms,

"

of bottom,

64

Depth, in fathoms,

8 $\frac{1}{2}$ fathoms

Nature of bottom,

Coast

Direction of

Wind

N N E

Force of

Wind

3

Direction of bottom current,

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

U S F C

Name and rank of commanding officer,

*James A. Smith
Master*

Name and position of observer,

*J. H. M. Smith
Master*

1882
REMARKS.

The cinnam obtained
kind clean & less yster shells
sea mud & grass

TEMPERATURE RECORD.

Instrument used, *Oyster Dredge*
 Current number of observation, *1336* = *86*
 Date, *Sept 24 1888*
 Locality, *Port of New York*
 Bearings, *Conimicut Pt S $8\frac{1}{2}$ W*
Bullsheads Pt N $2\frac{1}{4}$ W Sayat Pt S $8\frac{1}{4}$ S
 Time of day, *3.24* : of tide, *$\frac{1}{2}$ Ebb*
 State of sky, *Clear*
 Temperature of air, *60*
 " surface of water, *65*
 " at depth of fathoms,
 " of bottom, *65*
 Depth, in fathoms, *6 feet*
 Nature of bottom, *Shells*
 Direction of ~~surface~~ *surface* current, *not L*
 Force of surface current, *3*
 Direction of bottom current,
 Force of bottom current,
 Name of vessel, *Fish Hawk*
 To what service attached, *U.S.F.C.*
 Name and rank of commanding officer, *James A Smith*
Master
 Name and position of observer, *J. M. Smith*
Master

1883
REMARKS.

Specimens Obtained
Sealed & preserved

TEMPERATURE RECORD.

Instrument used, *Oyster dredge*
 Current number of observation, *7332* *x 97*
 Date, *Sept 24* *PT*
 Locality, *Panama River*
 Bearings, *Leominical - S 8 x W*
Bullock's S 4 x W x W 1/2 W Naga at 11 S 2 x S 1/2 S
 Time of day, *3.30* ; of tide, *3' Lr Ebb*
 State of sky, *b*
 Temperature of air, *60*
 " surface of water, *65*
 " at depth of fathoms,
 " of bottom, *65.15*
 Depth, in fathoms, *4 fathoms*
 Nature of bottom, *Sand*
 Direction of ~~surface~~ current, *N 4 E*
 Force of ~~surface~~ *mind* current, *3*
 Direction of bottom current,
 Force of bottom current,
 Name of vessel, *Fish Hawk*
 To what service attached, *No 8 Flc*
 Name and rank of commanding officer, *James H. ...*
Master
 Name and position of observer, *John ...*
Master

1834
REMARKS.

Lead Oyster & clam shells. Sea
weed & grass.

TEMPERATURE RECORD.

Instrument used. *Oyster Weigher* *88

Current number of observation. *1333*

Date. *Sept 24 28*

Locality. *Pero River*

Bearings. *Cominicut Lt S x W 1/4 W*

Bullheads Lt W x N 7/8 W Sayat Pt S E x S

Time of day. *3.35* : of tide. *3/2⁺ Ebb*

State of sky, *Clear*

Temperature of air, *60*

" surface of water, *64.5*

" at depth of fathoms,

" of bottom, *64*

Depth, in fathoms, *5 feet*

Nature of bottom, *Sand*

Direction of ~~surface current~~ *Wind* *N N E*

Force of ~~surface current~~ *Wind* *3*

Direction of ~~bottom current~~ *Wife*

Force of bottom current,

Name of vessel. *Fish Hawk*

To what service attached, *U.S.F.C.*

Name and rank of commanding officer. *James R. Smith*
Master

Name and position of observer, *J. M. Smith*
Master

1885
REMARKS.

seen gythe shells
& Starfish

TEMPERATURE RECORD.

Instrument used,

Oyster dredge

89

Current number of observation,

1334

Date,

Sept 28 88

Locality,

Porro River

Bearings,

Laniniqua Re-1788

Bullock's Cr. N. W. W. May at 15 18 1/4 S

Time of day, *11, 30 am* ; of tide, *4" Or Flood*

State of sky,

Cloudy

Temperature of air,

61

"

surface of water,

61

"

at depth of

fathoms,

"

of bottom,

GV

Depth, in fathoms,

2 3/4

Nature of bottom,

Hard

Direction of

wind

~~surface current,~~

N E

Force of

wind

~~surface current,~~

2

Direction of

surface

~~bottom current,~~

Force of bottom current,

Name of vessel,

Fish Hawk

To what service attached,

26 S F C

Name and rank of commanding officer,

James A. Smith

Master

Name and position of observer,

J. M. Knight

Master

1336
REMARKS.

Specimens Obtained
1 star fish & dead oyster shells

TEMPERATURE RECORD

TEMPERATURE RECORD.

Instrument used, *Oyster dredge*

Current number of observation, *1335* '90

Date, *Sept 25* 88

Locality, *Provo River*

Bearings, *Laminated L- S X E*

Bullet hole in NW 1/4 of SE 1/4 S

Time of day, *11.45* ; of tide, *4.20* *flood*

State of sky, *cloudy*

Temperature of air, *65*

" surface of water, *64*

" at depth of fathoms,

" of bottom, *64*

Depth, in fathoms, *2 3/4*

Nature of bottom, *Sand*

Direction of ~~surface current~~ *Wind* *NE*

Force of ~~surface current~~ *Wind* *2*

Direction of ~~bottom current~~ *Drift*

Force of bottom current,

Name of vessel, *Fish Hawk*

To what service attached, *U S F C*

Name and rank of commanding officer *James A Smith*
Master

Name and position of observer,

John L. Johnson
Master

1537

REMARKS.

14 - 2 19"

6 1/2

15 - 1/4 "

5 1/2

20.6

44 15-

53, 58

9/-

2 Stamp like dead oyster shells

93 dead oyster shells

101

103

104

118

119

57
57
57

121
20
37

17
17
17

|||||

4

Albion River to Mountain Bay